

COCHIN PORT AUTHORITY

Chief Engineer's Office,
Cochin Port Authority,
W/Island, Cochin - 682009, KERALA
Tele: 91-0484-2666414/0484-258-2400
Email :ce@cochinport.gov.in, coptce@gmail.com
website: www.cochinport.gov.in



Tender No. T9/T-2039/2024-C

Date : - 02.12.2024

NOTICE INVITING TENDER (NIT) eTender

1. On behalf of Union Territory of Lakshadweep Administration (UTLA), Bids are invited under Single Stage Two Cover system [Technical Bid and Price Bid] by Cochin Port Authority (CoPA), from reputed Bidders meeting Minimum Eligibility Criteria specified hereunder for award of Project through competitive bidding in Electronic mode (e-Tenders), in accordance with the procedure set out in the Bid Document for **“Construction of Jetties, Landside facilities and allied facilities at Eastern and Western sides in Kalpeni Island of Lakshadweep on EPC Contract basis”** (the “Project”) through an Engineering, Procurement and Construction (the “EPC”) Contract as per following details:

Table - 1

Estimated Project Cost	Rs.301 crore [Excluding GST]
Cost of Bid Document	Rs.11,800/- including 18% GST (Non refundable) furnished either through Demand Draft/ Pay Order/ Banker's Cheque drawn in favour of the FA & CAO, CoPA, payable at Kochi, from any Nationalised Bank / Scheduled Bank in India. Payment can also be made online mode (NEFT/RTGS) as per Bank details furnished in the Bid Document, being the cost of single copy of the Bid Document
Download period of Detailed NIT and Bid Document	Detailed NIT : From 02-12-2024 Bid Document : From 10.00 hrs. on 20-12-2024 to 17.00 hrs. on 30-01-2025
Bid Bond	Rs. 3.11 Crore furnished either through Demand Draft / Pay Order or Banker's Cheque drawn in favour of Financial Adviser & Chief Accounts Officer, CoPA, payable at Kochi from any Nationalised Bank/Scheduled Bank in India or through an irrevocable Bank Guarantee (BG) valid for a period of 180 days plus 60 days claim period, calculated from the Bid Due Date, enforceable and encashable at Kochi. Payment can also be made online mode (NEFT/RTGS) as per Bank details furnished in the Bid Document
Date of Site Visit arranged	11-12-2024 (Tentative)
Last Date for receiving queries	03-01-2025
Date of Pre-Bid Meeting (Hybrid mode)	06-01-2025 at 11.00 hrs.

Last date and time of submission of Bids	17.00 hours on 30-01-2025
Date and time of opening the Bids	11.00 hours on 31-01-2025
Validity period of Tender	180 days from the Bid Due Date
Time for Completion	36 Months from the date of commencement of Work

2. The major components envisaged in the Project are as follows:
 - (i) Construction of 360m x 20m Eastern Jetty
 - (ii) Construction of 130m x 8.5m Approach Trestle for Eastern Jetty
 - (iii) Construction of 70m x 12m new Western Jetty
 - (iv) Construction of 225m x 8.5m Approach Trestle for Western Jetty
 - (v) Slipway and boat repair workshop building.
 - (vi) Improvement of facilities for fisherman community like Development / Redevelopment of ice plant, fuelling system, cold storage etc.
 - (vii) Road connecting the Approach Trestle to existing road network, if required
 - (viii) Construction of passenger waiting hall including lounge, gatehouse with all utilities, landscaping etc.
 - (ix) Providing navigational aids, gangway etc.
 - (x) Providing Aesthetic lighting (External / Internal), illumination, water and power supply, LT cabling works, , ELV, DG sets, data cabling, LT panels, solar panels with battery backup, HVAC, High Masts, lightening protection, fire fighting facilities, CCTV including night vision etc.

3. The Scope of Work includes the following but is not limited to:
 - (i) Carryout Engineering and Design of the Marine works & other land-side facilities including buildings, electrical and utilities as detailed at para 2 above in EPC mode. The detailed project description along with layouts etc. is enclosed as *Annexure - I*.
 - (ii) Appointing a Proof-Consultant, IIT /NIT, acceptable to CoPA and getting approvals for all Design, Drawings and Documents to be prepared by the EPC Contractor.
 - (iii) Provide and mobilize all Workforce, Material, Plant and Equipment required for construction of the above items of work at the designated locations.
 - (iv) Getting all necessary permits and clearances for construction except Environmental / CRZ Clearance.
 - (v) Any additional works required to be carried out to mitigate adverse effects on the environment and also as directed by the Authority.
 - (vi) Any incidental and ancillary works that may be required to complete the main works thus fulfilling the intended requirements.

4. It is brought to the notice of the prospective Bidders that the land for the development of infrastructural facilities will be handed over to the Contractor only in a phased manner as per the progress of the Work due to the constraints of land availability in the island.

5. The Contractor's Work Area, area for precast yard, material collection yard in the island will be made available to the successful Bidder as per the availability and also may be provided at different locations.

6. **Liquidated Damages** - In case of delay in completion of the contract, half percent of the contract value per week of delay subject to a maximum of ten percent of contract value shall be levied.
7. **Incentives/ Bonus** - One percent of the contract value per month subject to a maximum of five percent of contract value for early completion of the project.
8. Bid Documents can be downloaded from the e-Tendering portal www.tenderwizard.com/CoPT on the dates specified in the **Table - 1** above by making online requisition. **Demand Draft /Pay Order/Banker's Cheque/Original BG for Cost of Bid Document drawn in favour of the FA & CAO, Cochin Port Authority shall be submitted within 3 days from the Bid Due Date, but the scanned copy of the same shall be attached with the e-Tender.**
9. Bid Document will also be available in Cochin Port website (www.cochinport.gov.in) as well as Central Public Procurement (CPP) Portal www.tenders.gov.in.
10. The Bidders need to obtain the one time User ID & Password for log-in to e-Tender system from the service provider M/s. KEONICS by paying registration amount of Rs.1,124/- by online payment using Credit/Debit Card/Net banking or DD in favour of "KSEDCL, Bangalore".
11. The intending Bidder must have valid Class-II or III digital signature certificate to submit the Bid. For further details and to obtain the digital signature, please contact e-Tender Help Desk No. 080 - 40482000 / 9746118529 / 9605557738.
12. The Bids shall be submitted "**online**" strictly in accordance with the Instructions to Bidders and Terms & Conditions given in the Bid Document. The Bidders shall submit scanned copy of all the required documents such as DD / Pay Order/Banker's Cheque/proof document for online payment towards the Cost of Bid Document, Bid Bond, other details required as per Bid Document through the e-Tender portal.
13. The bidder is responsible to download Addenda/ Amendments/ Errata/ Replies to the Queries of the Bidders etc., if any, issued by CoPA, from the e-Tendering Portal / CoPA Website / CPP Portal before submission of the Bid. **Any shortfall in submissions of the said Addenda / Amendments / Errata / Replies to the Queries of the Bidders, duly signed, along with the downloaded documents while submitting the Bid will render the Bid Documents incomplete and incomplete Bid Documents will be rejected.**
14. All Bids are to be submitted **online** only on the website www.tenderwizard.com/COPT. No Bids shall be accepted off-line.
15. Cochin Port Authority will not be held responsible for any technical snag or network failure during online bidding. It is the Bidder's responsibility to comply with the system requirement, i.e. hardware, software and internet connectivity at Bidder's premises to access the e-Tender portal. Under any circumstances, Cochin Port Trust shall not be liable to the Bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-Tender system or internet connectivity failures. The Bidder is advised to upload required documents well in advance in order to avoid last minute technical snags, if any, happens.
16. In Lakshadweep islands only one airport is available Agatti Island and it is a domestic one only. The islands are connected to mainland Kochi by the passenger vessels owned and operated by UTLA. The intra island connectivity is carried out by the High Speed Crafts [HSC] owned and operated by UTLA. In addition to the above, there are barges owned and operated by private parties that transport cargo to the islands. These barges ply between the islands and Beypore, Kochi and Mangalore. The high-speed vessels and barges operate only during the fair weather season.
17. **Site Visit to Kalpeni Island:** Site visit to Kalpeni island for the prospective Bidders is arranged on 11-12-2024. CoPA along with UTLA will extend all assistance for the

logistics to the island. For further assistance for logistics the bidders may contact the Suptdg. Engineer, CoPA (9526062899). The prospective Bidders along with CoPA and UTLA officials and the Consultants of CoPA can visit the island and project locations and can have an open discussion regarding Project details. The Bidder is strongly advised to visit and examine the island, site and its surrounding areas and obtain, at his own cost and responsibility, all information and data that may be necessary for preparation of the Bid and for entering into and execution of Contract for the Works in accordance with the Conditions of Contract. The Bidder and his personnel or agents, up to a maximum of two individuals, only will be granted permission by the Authority to enter upon the Site for the purpose of inspection but only upon the Bidder submitting a written undertaking to the Authority that his personnel and agents, will release and indemnify the Authority and his personnel and agents from and against all liability in respect thereof. The Bidder will be solely responsible for any death or personal injury, loss of or damage to property, and any other loss, damage caused or incurred by the Bidder and also any costs, and expenses incurred by the Authority or his personnel, as a result of such inspection and Site visit by the Bidder or his personnel or agents. **Bidders will be required to submit along with their Bid an undertaking that they have visited the site and collected all necessary details required to submit their offer.**

18. The prospective Bidders and his representatives who wish to visit the island has to be submit the Aadhar card [both sides] in pdf format and a passport size photo in jpeg format to the undersigned or to thadevus@cochinport.gov.in with copy to sheeja@cochinport.gov.in, 4 days before to the site visit date intimated at **Table -1** above for availing the permit to visit the island.
19. The prospective Bidders who visit the Kalpeni island can come to Agatti island by flight and HSCs can be arranged to visit Kalpeni island. They can also visit Kalpeni directly from Kochi in passenger vessels. The visiting schedule shall be intimated 4 days before to the site visit date intimated at **Table -1** above so as to schedule the HSCs and passenger vessels. The number of personnel visiting the islands shall also be intimated by the bidders so as to request UTLA to block the tickets in the vessels / HSCs.
20. The Bidder shall submit the original documents towards the Cost of Bid Document and Bid Bond; Power of Attorney, if applicable, Integrity Pact **along with the Letter of Submission**, in a sealed cover duly mentioning the Tender No. & Name of Work, Due date of opening of Tender and Name of the Bidder to the **Chief Engineer, Cochin Port Authority, W/Island, Cochin - 682009, KERALA**, within three days from the Bid Due Date as indicated in the Table - 1 of the Notice Inviting Tender. **Non submission of the original financial instruments towards Cost of Bid Document and EMD and within the above period leads to disqualification of Bids.**
21. MSME Bidders who are registered with District Industries Centre (DIC) or National Small Industries Corporation (NSIC) or Udyog Aadhaar Memorandum or any other body specified by the Ministry of MSME for similar nature of works shall be eligible for issue of Bid Document free of cost. They are required to submit the documentary proof of such registration along with QR code, for claiming the available exemptions and a scanned copy of Exemption Certificate duly notarized shall be uploaded in the e - Tender Portal. **If the Registration Certificate does not pertain to Similar Works as defined in Clause 22 below of the NIT, the Bid will be rejected.**
22. However, Bid received will be considered only if they meet the following **Minimum Eligibility Criteria:**
 - (A) **Technical Capacity:**
 - (a) The Bidder should have experience of having successfully completed the works as mentioned below during the last 7 (seven) years ending 30th November 2024.
 - i) Three Similar Works of each costing not less than **Rs.120.40 crore**

or

ii) Two Similar Works of each costing not less than **Rs.150.50 crore**

or

iii) One Similar Work costing not less than **Rs.240.80 crore**

AND

(b) The Bidder should have experience of having successfully completed one Similar Work costing atleast **Rs.120.40 crore** on EPC basis either for the projects qualified under (a) above or for any infrastructure project.

(B) Financial Capacity:

(a) The Bidder should satisfy the following financial requirements as per their latest audited Financial Statements/Balance Sheets:

- Minimum Average Annual Turnover of **Rs. 90.30 Crore** during last three financial years ending 31stMarch, 2024. For this purpose, only the Turnover income from operations shall be considered.

(b) The Available Bid Capacity of the Bidder shall be more than the total Bid Value. The Available Bid Capacity will be calculated as under:

Assessed Available Bid Capacity= $A \times N \times 1.5 - B$, where

'N' = Number of years prescribed for completion of the subject Contract

'A' = maximum value of works executed in any one year during the last seven years (at current price level).

'B' = value at current price level of existing commitments and ongoing works to be completed in the next 'N' years.

The Bidder shall furnish statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works, which shall be certified by a Chartered Accountant.

(c) The Bidder shall have positive Net Worth at the close of the last three financial years.

(d) The Bidder shall demonstrate that they have available liquid assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements for the subject Contract after meeting its cash flow requirements for contracts currently in progress and for future contract commitments.

Explanatory notes to (A) & (B) above:

Note 1: "Similar Work" means Construction of Marine Structures, viz. Open Piled Jetties / Berths / Wharfs in sea/ backwater and related onshore works including buildings / utilities.

Note 2: The value of executed works shall be brought to the current costing level by enhancing the actual value of the work upon completion by using the following enhancement factors.

Table - 2

Year before	Multiplying factor
One year [November, 2023]	1.07
Two years [November, 2022]	1.14

Year before	Multiplying factor
Three years [November, 2021]	1.21
Four years [November, 2020]	1.28
Five years [November, 2019]	1.35
Six years [November, 2018]	1.42

Note 3:- The experience certificate of Works executed in private sectors/organisations shall be considered for qualification, only on submission of Form 26AS along with Work Order and Completion Certificate duly notarised.

Note 4:- Satisfactory Clients' /Owners' Completion Certificate or documentary proof shall be submitted in support of the Assignments / Works performed and claimed by the Bidder / Partners to Joint Venture / Consortium, in Annexure to be mentioned in the Bid Document to fulfill the Eligibility Criteria for Qualification. A statement duly certified by the Chartered Accountant / Firm showing the average Annual Financial Turnover over the last 3 financial years shall be submitted. The registration number and UDIN of the Chartered Accountant / Firm has to be mentioned/produced by the Chartered Accountant.

Note 5:- The Works reckoned for the above purpose are those executed by the Bidders as Prime Contractor or proportionately as member of Joint Venture/Consortium, authorized and approved by the Employer of the Work(s) against which the Bidder has claimed his experience. If the experience is as member of Joint Venture/Consortium, the Bidder shall attach notary attested copy(s) of the JV Agreement(s). The Bidder is also obliged to produce the original of the certified copy(s) on request by the department. Experience as a Sub-Contractor, Petty Contractor, Labour Rate Contractor, Sub-letted work shall not be accepted.

23. Other Eligibility Considerations:

- 23.1 Even though the Bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
- i) made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements;
 - ii) record of poor performance such as abandoning the Works, not properly completing the Contract, continuous / inordinate delays in completion of Works, constant litigation history, barred by the Central / State Government from participating in any project or financial failures etc.; and/or
 - iii) Blacklisted / Debarred by any Govt. of India Organizations / PSU / PSE / Govt. Depts. / reputed Private Sector Companies etc. during the last three years.
 - iv) Records of poor performance during the last five years, as on the date of application, such as abandoning the work, rescission of the contract for reasons which are attributable to non-performance of the contractor, inordinate delays in completion, consistent history of litigation resulting in awards against the contractor or any of the constituents, or financial failure due to bankruptcy, and so on. The rescission of a contract of venture JV on account of reasons other than non-performance, such as the most experienced partner (major partner) of JV pulling out.
- 23.2 The Bidders having EPF and ESI registration only shall be considered for qualification in the Bids, if applicable, as per EPF /ESI Acts. In case, the Bidder does not have the required number of employees which makes such registration

mandatory, an Undertaking as per Annexure to be mentioned in the Bid Document to the effect shall be furnished.

24. No Joint Venture (JV) will be allowed.

Bid is acceptable from bidders who have submitted their bids on their individual capacity and bids received as JV will be disqualified.

25. Bids received after the stipulated last date and time for receipt due to any reason will not be considered.

26. Cochin Port Authority reserves the right to reject / cancel / postpone any or all the Bids at any stage of the Bidding without assigning any reasons thereof, which will be binding on all Bidders.

27. **Integrity Pact (IP)** shall cover this Bid throughout its various phases, and IP would be deemed as a part of the Contract through an appropriate provision. The Bidders shall sign and submit an "Integrity Pact" to be executed between the Bidder and Cochin Port Authority along with Bid. Bids not accompanied by a duly signed "Integrity Pact" shall be liable for rejection. IP would be implemented through the following Independent External Monitor (IEM) for this Bid or the IEM subsequently appointed.

1. Shri. M J Joseph, ICAS (Retd),
37, Da Costa Square,
3rd Cross, Cooke Town,
Bangalore - 560 084
Email : joseph,iem@cochinport.gov.in

2. Shri. Punati Sridhar, IFoS (Retd.)
8C, Block - 4, 14-C Cross,
MCHS Colony, HSR 6th Sector,
Bangalore - 560 102
Email : sridhar.iem@cochinport.gov.in

28. For full details of the scheme of IP, Bidders may visit the website of Central Vigilance Commission, New Delhi.

29. This Notice shall form part of the Bid Document and shall be duly signed and submitted along with the Bid by the Bidders.

Sd/-
CHIEF ENGINEER i/c
COCHIN PORT AUTHORITY
Tele Fax: 91 0484 2666414
Email: ce@cochinport.gov.in;
coptce@gmail.com

Invitation of Bids for “Construction of Jetties, Landside facilities and allied facilities at Eastern and Western sides in Kalpeni Island of Lakshadweep on EPC Contract basis”

1 Project Background

Lakshadweep, an archipelago consisting of coral islands and reefs, is the smallest Union Territory of India. These beautiful and unpolluted Islands comprising of total land area of about 32 Sq. Kms, are surrounded by about 4,200 Sq.Km territorial sea area. Lakshadweep Island has ten inhabited islands, 17 uninhabited islands, a good number of attached islets, four newly formed islets and five submerged reefs. They are scattered in the Arabian Sea at distance of 220 to 440 Kms. off the west coast of Kerala. The main occupation of the people is fishing, coconut cultivation and coir twisting. The islands are designated as restricted area and permit from the Union Territory of Lakshadweep Administration (UTLA) is required to visit the islands.

People here mainly depend on the water transport for movement between the islands and the mainland. Apart from passengers, all the cargo such as essential commodities including medical supply, food supply, construction material, clothing, stationeries etc are brought from mainland - either Cochin, Bepore or Mangalore. In addition to above, islanders depend on the mainland for specialist medical needs and higher education. Also, during the non-monsoon season, a huge number of tourists visits the islands mainly via ships. Further to the above, the export commodities such as coconuts, fish etc. are also transported to mainland using water transport. In short, shipping services is the lifeline for the people of Lakshadweep.

As a step towards improving the connectivity to the island ensuring the safety and comfort of the passengers, UTLA intends to develop a multimodal jetty that can handle all the passenger vessels being operated in Lakshadweep islands.

In this initiative, the development proposals identified for the Lakshadweep islands for immediate development that will improve the connectivity and also the accessibility of tourists to the islands are as follows:

- ✓ Development of open eastern jetty that can handle even Cruise vessels at Kalpeni and Kadmath
- ✓ Development of western jetty in Kalpeni and Kadmath islands
- ✓ Refurbishment and extension of Androth breakwater
- ✓ Development of multimodal jetty and Navy jetty at Androth
- ✓ Development of slipway and associated facilities at Kalpeni, Kadmath and Androth
- ✓ Dredging of harbour and Reclamation for back up area in Androth
- ✓ Development of landside facilities including passenger facilitation centre with modern amenities on both eastern and western side, warehouse etc in Kalpeni, Kadmath and Androth
- ✓ Expansion of existing eastern jetty in Kavaratti, Agatti and Minicoy islands for handling larger vessels

These developments are mostly funded under Sagarmala Programme as Grant along with UTLA’s internal funds.

UTLA has engaged Cochin Port Authority (CoPA) as Project Management Consultants for providing technical support / consultancy services to UTLA for development of Port and Shipping infrastructures in all inhabited Lakshadweep Islands. CoPA with the assistance of Consultants, M/s. Assystem India Limited, Chennai has prepared Detailed Project Report to study the requirement to refurbish and modernise the existing facilities, propose better facilities so that unhindered shipping services and safe passenger and cargo handling all around the year can be achieved.

Based on the study, CoPA have recommended to take up port led developmental activities for six islands out of which the following two packages are identified for immediate development:

- **Package-1** :Construction of Jetties, Landside facilities and allied facilities at Eastern and Western sides in Kalpeni Island of Lakshadweep on EPC Contract basis
- **Package-2** :Construction of Jetties, Landside facilities and allied facilities at Eastern and Western sides in Kadmath Island of Lakshadweep on EPC Contract basis

This tender is being invited to identify highly experienced and reputed contractors for the “**Package-1: Construction of Jetties, Landside facilities and allied facilities at Eastern and Western sides in Kalpeni Island of Lakshadweep on EPC Contract basis**” and Package-2 will be invited shortly .

The main objective for the proposed developments is to provide all weather 24x7 unhindered shipping operations and effective & safe passenger/cargo handling.

2 Project Site Details - Kalpeni Island

The Union Territory of Lakshadweep is an archipelago situated in the Arabian Sea between 08° 00' N and 12° 30' N latitude and 71° 00' E and 74° 00' E longitude and at a distance of about 220 to 440 km from the west coast of India. The length of the coastline is 132 km, which is approximately 1.6% of India’s total coastline.

Kalpeni island is about 287 Km away from Kochi and is the largest inhabited island among the four islands located in the Kalpeni atoll. Located in the southeast end of the atoll with an area of 2.79 sq km, Kalpeni is about 5.3km long and has a maximum width of about 1.4km. The location map of the Kalpeni island is presented at **Figure - 1. Error! Reference source not found.**

The lagoon of Kalpeni lies on the Northwest side of the island and extends to about 25.60 sq km. The outer ring of the lagoon is almost unbroken and living corals are present inside the lagoon. Located north of Kalpeni is the Kodithala island and further north is the Cheriyan island which also forms part of Kalpeni atoll.



Figure 1 - Location of Kalpeni Island

3 Scope of work to be considered under present Bid

As part of the present project, UTLA intends to develop various marine and land side facilities on both sides of Kalpeni Island, i.e, Eastern Side and Western Side. The details of the facilities planned are available in the drawings TD G001 to TD G008 attached along with this NIT as Annexure - II. The following infrastructure shall be developed as part of the present Bid:

3.1 Developments on eastern side of Kalpeni Island

A brief of the various facilities to be developed on the eastern side of Kalpeni Island are as follows. The details given below are only for information to the Bidders and for the sole intent of providing preliminary information to Bidders for planning purposes only.

3.1.1 Open Piled jetty of 360m length and 20m width located at (-)13m CD water depth to handle Cruise Vessels

The proposed open eastern jetty at Kalpeni is a multipurpose jetty that will cater to all the berthing requirements for passenger vessels as well as cruise vessels. The length of the jetty is 360m so that the cruise vessels can also be berthed. The jetty will have a width of 20m which will be sufficient to handle people and cargo brought by the vessels. In order to avoid any dredging and also considering provision for future expansion, the jetty is proposed at location where (-)13m water depth is available. The layout of proposed Eastern Jetty is at Figure - 2.

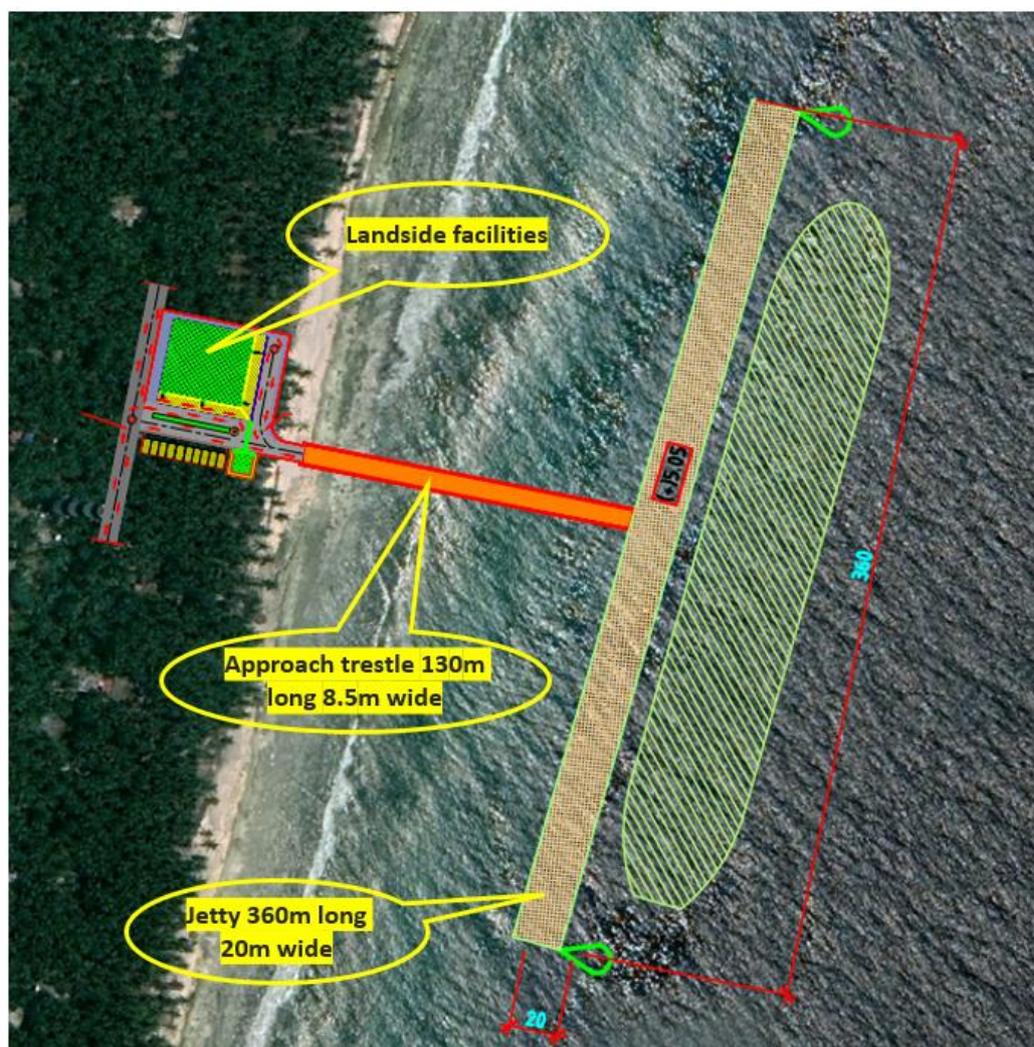


Figure 2 - Layout of eastern jetty

The structural system of the jetty shall be open piled structure with bored cast in-situ reinforced concrete piles with RCC deck structure as shown in Figure 3. As the Jetty is proposed to cater for vessels of various free boards, the Jetty is to be provided with

continuous fender facia to accommodate range of vessels at all tidal conditions. The jetty shall be developed with all necessary fixtures including pneumatic fenders, bollards, safety ladders, berth lights, mooring chains, rings etc.. In addition to the above, there shall be staircases provided along the jetty face so that the jetty can be accessed by smallest vessels during low tide.

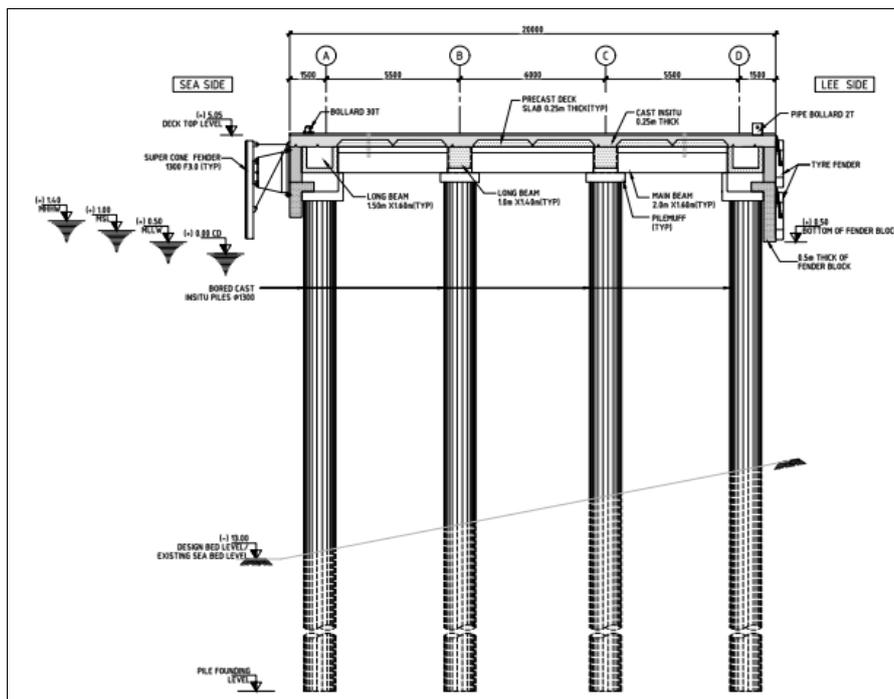


Figure 3 - Cross section of eastern jetty

3.1.2 Approach Trestle to the proposed jetty of length 130m and width 8.5m

The proposed Approach Trestle shall be of length 130m and width 8.5m. A clear carriage width of 7 m is proposed apart from foot path of 1 m. The structural system consists of RCC deck (precast + in-situ) supported on bored cast in-situ reinforced concrete piles.

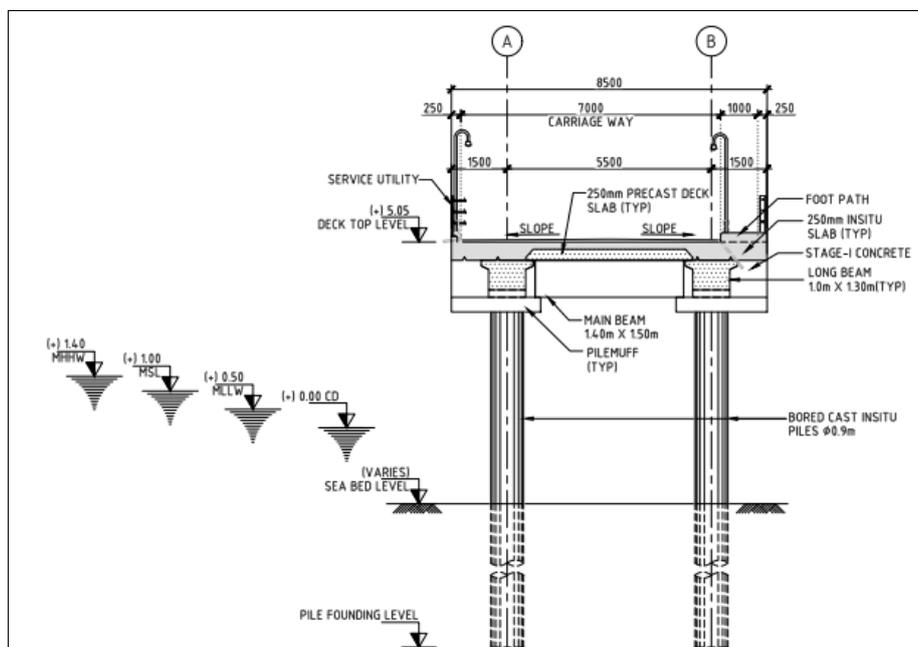


Figure 4 - Cross section of approach trestle of eastern jetty

3.1.3 Construction of associated buildings on eastern side

a. Passenger Facilitation Centre:

It is proposed to construct a centralised air conditioned passenger facilitation centre with all modern facilities complying with world class standards. The proposed building shall be a two storied one with total built-up area of about 2,250sq.m. The elevation of the buildings shall be to meet international standards and also keeping the heritage and culture of Lakshadweep islands.

The building shall have a separate transit area demarcated as arrival and departure terminal. The arrival terminal shall have a document verification desk for the passengers entering the island and other basic amenities including restroom and cafeteria.

The departure terminal shall be provided with a ticketing counter, document verification desk, security clearance area for both passengers and baggage, IT/Security/CCTV rooms, and other basic amenities including prayer hall, emergency health care, convenience store, shopping, restroom, cafeteria etc.. In addition to the above, a VIP lounge and office spaces facility shall also be provided in the passenger building.

The scope includes constructing the building complete with structural, architectural, interiors, MEP, HVAC, ELV, solar panels with battery backup etc. required for the operation of the building. The building shall be aesthetically attractive and shall strictly be built as per the architectural requirements specified in the Bid Document.

b. Security building:

A security building with a plinth area of 64sqm shall be constructed with all amenities including office space, washroom, storage, etc..

c. Compound Wall

For access control to all the buildings and jetty shall be covered all around by compound wall as per technical specifications of the Bid Document.

3.1.4 Road

All internal roads shall be complete with minimum 7m wide carriage way with all markings, signages and drainage. The internal road for the project includes:

- Road to connect Passenger Facilitation Centre building to the External road
- Road to connect Jetty with the External road
- Internal circulation roads to connect various landside facilities.

3.1.5 Utilities and Services

The project includes development of all utilities including Power supply, Water supply, LT cabling works, , ELV, DG sets, data cabling, LT panels, solar panels with battery backup, HVAC, High Masts, lightening protection, fire fighting facilities, CCTV with night vision etc, IT & communication etc..

3.2 Developments on western side of Kalpeni island

The proposed developments on the western side of the Kalpeni Island shall include the following:

3.2.1 Open Piled Jetty of 70m length and 12m width

This jetty will cater to all the cargo handling requirements and intra island connectivity for the islands. The layout of jetty is at **Figure 5**.



Figure 5 - Layout of western jetty

The structural system of the jetty shall be open piled structure with bored cast in-situ reinforced concrete piles with RCC deck structure as shown in 6. As the Jetty shall cater for vessels of various free boards the jetty is provided with continuous fender facia to accommodate wide range of vessels including bunkering vessels, fuelling vessels, RoPAX vessels in addition to High Speed Vessels and barges having size within the design vessel range. The jetty shall be developed with all necessary inserts including fenders, bollards, safety ladders, berth lights, etc.. In addition to the above, there shall be staircases provided along the jetty face so that the jetty can be accessed by smallest vessels during low tide. Provision shall be made to cater sea planes on the lee side of the Jetty using concrete floating pontoons. The typical cross-section of the proposed western jetty is presented at Figure 6.

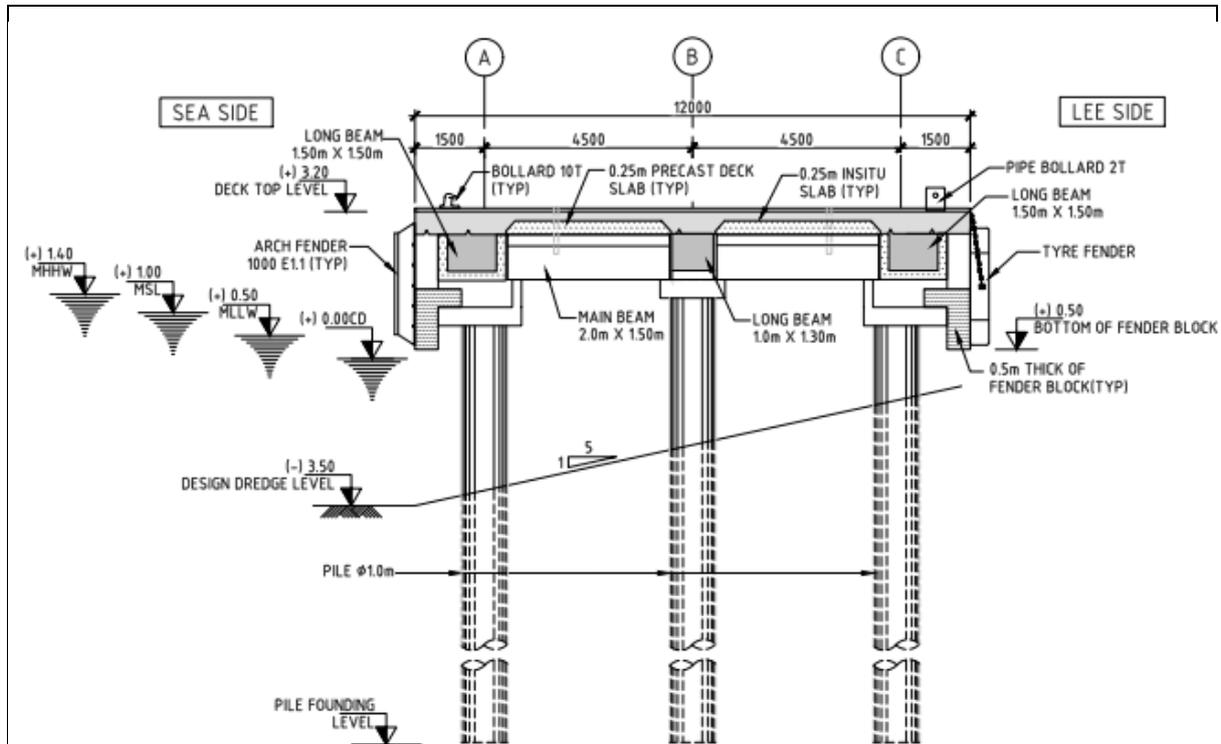


Figure 6 - Cross section of western jetty

3.2.2 Approach Trestle

The approach trestle shall be open piled structure of length about 225m and 8.5m width to connect jetty with landfall point. The Approach Trestle shall be provided with latest beautiful handrails, lighting and other furniture. The lighting shall be provided such that the jetty shall be a tourist attraction other than for passenger handling. A clear carriage width of 7 m is proposed apart from foot path of 1 m shall be provided. The structural system consists of RCC deck (precast + in-situ) supported on bored cast in-situ reinforced concrete piles.

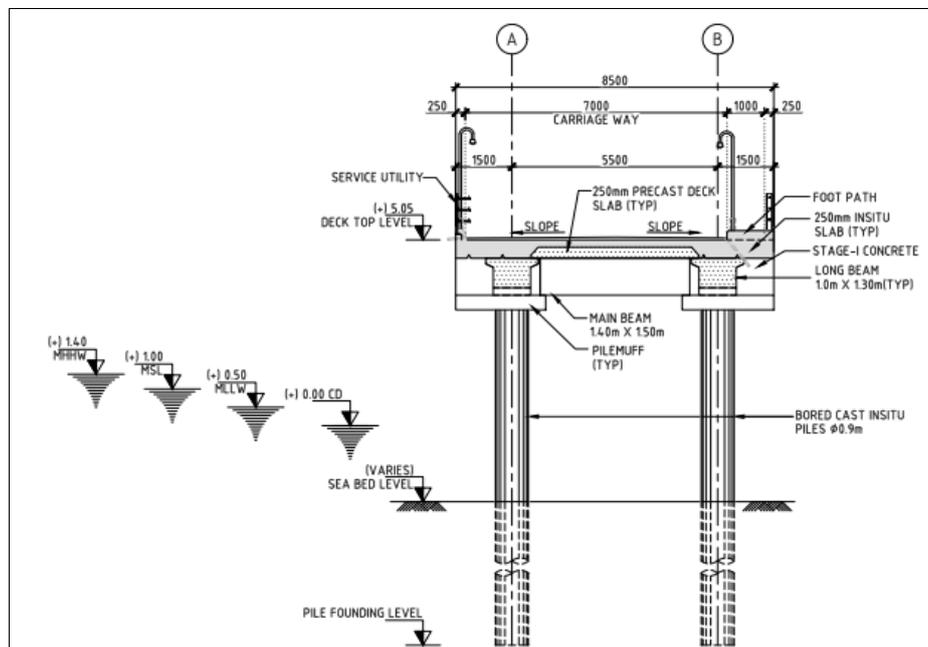


Figure 7 - Cross section of approach trestle of eastern jetty

3.2.3 Construction of associated buildings on western side:

a) **Passenger Waiting Hall:**

This building shall be single storied centralised air conditioned passenger waiting hall with all modern facilities complying with world class standards with total built-up area of 500 sqm. The elevation of the buildings shall be to meet international standards and also keeping the heritage and culture of Lakshadweep islands.

The building will have separate transit area demarcated as arrival and departure terminal. The arrival terminal will have a document verification desk for the passengers entering the island and other basic amenities including restroom and cafeteria. The departure terminal will have a ticketing counter, document verification desk and other basic amenities including restroom and cafeteria.

The scope includes constructing the building complete with structural, architectural, interiors, MEP, HVAC, solar panels with battery backup etc. required for the operation of the building. The building shall be aesthetically attractive and shall be strictly built as per the architectural requirements specified in the Bid Document.

b) **Warehouse:**

Warehouse shall be of 200 sqm plinth area in a plot of 250 sqm and will be utilised for storage of perishable items such as food grains and other food supplies. The scope of Contractor also includes the MEP, HVAC, etc..

c) **Security building:**

A security building with a plinth area of 64sqm shall be constructed with all amenities including office space, washroom, storage, etc..

d) **Compound Wall**

For access control to all the buildings and jetty shall be covered all around by compound wall as per technical specifications.

3.2.4 Road

All internal roads shall be complete with minimum 7m wide carriage way with all markings and signages. The internal road for the project includes:

- Road to connect Passenger Waiting Hall building to the External road
- Road to connect Jetty with the External road
- Internal circulation roads to connect various landside facilities.

3.2.5 Utilities and Services

The project includes development of all utilities including Power supply, Water supply, LT cabling works, , ELV, DG sets, data cabling, LT panels, solar panels with battery backup, HVAC, High Masts, lightening protection, fire fighting facilities, CCTV with night vision etc, IT & communication etc..

3.2.6 Development of slipway and ancillary facilities

The project includes development of a fully functional slipway for repair facilities of fishing boats. The proposed slipways shall be designed and constructed for boats with length upto 20m and draft (-)1.5m. Also, a separate repair bay for fishing boat shall be developed by the contractor. The scope of the present project includes the development of Civil Works only.

The project also includes development of a repair shed of 150 sqm in addition to the slipway. The scope shall also include civil and MEP excluding that for equipments. However, the equipment required for boat repair facility including cradle and

electrically operated winch system shall be excluded in the scope of the EPC contractor.

The scope of project also includes development of buildings for Ice Plant and Fuel station of size 150sqm built-up area each. The scope shall also include civil and essential MEP works but excluding MEP works for operating equipments.

LIST OF DRAWINGS

SL. No.	Details of Drawing	Sheet No.
1	Kalpeni - Eastern Jetty - Development Plan	TD G001 - R0
2	Kalpeni - Western Jetty - Development Plan	TD G002 - R0
3	Kalpeni - Eastern Jetty - General Arrangement	TD G003 - R0
4	Kalpeni - Eastern Approach Trestle - General Arrangement	TD G004 - R0
5	Kalpeni - Western Jetty - General Arrangement	TD G005 - R0
6	Kalpeni - Western Approach Trestle - General Arrangement	TD G006 - R0
7	Kalpeni - Passenger Facilitation Centre at Eastern side and Warehouse - Floor Plans	TD G007 - R0
8	Kalpeni - Security Room and Passenger Waiting Hall at western Side - Floor Plans	TD G008 - R0
